UNITED STATES DEPARTMENT OF AGRICULTURE

FOOD SAFETY AND INSPECTION SERVICE WASHINGTON, DC

FSIS DIRECTIVE

6100.1

9/13/07

DO NOT IMPLEMENT THIS DIRECTIVE UNTIL: 10/1/07

ANTE-MORTEM LIVESTOCK INSPECTION

I. PURPOSE

The purpose of this directive is to provide instructions to inspection program personnel on how to inspect livestock before (ante-mortem) slaughter. In addition, this directive officially cancels the Meat and Poultry Inspection Manual, Subparts 9A and 9B, the ante-mortem livestock sections. Inspection program personnel are no longer to use the Meat and Poultry Inspection Manual. Additionally, this directive instructs Public Health Veterinarians (PHVs) on making dispositions for livestock ante-mortem and documenting the findings. Finally, this directive includes instructions for determining disposition of non-ambulatory disabled cattle.

II. CANCELLATIONS

Meat and Poultry Inspection Manual Subparts 9A and 9B, ante-mortem livestock sections

FSIS Notice 46-05, Verification of an Establishment's Segregation Procedures Prior To FSIS Ante-mortem Inspection

FSIS Notice 05-06, Re-examination of Bovine That Become Non-ambulatory After Passing Ante-mortem Inspection

FSIS Notice 5-04, Interim Guidance for Non-Ambulatory Disabled Cattle and Age Determination

III. RESERVED

IV. REFERENCES

Federal Meat Inspection Act (FMIA) 21 U.S.C. 603

Regulations 9 CFR 307.2(a), 309, 310, 311, 320.1(b)(1)(iv), and part 500

FSIS Directives 5000.2, Review of Establishment Data by Inspection Personnel

FSIS Directive 6100.2, Post-mortem Livestock Inspection

FSIS Directive 6900.1, Humane Handling of Disabled Livestock

FSIS Directive 6900.2, Humane Handling and Slaughter of Livestock

FSIS Form 6150-1, Identification Tag – Ante-mortem

FSIS Form 6200-14, Daily Disposition Record

FSIS Form 6200-16, Summary of Ante-mortem Examination

DISTRIBUTION: Electronic OPI: OPPED

V. BACKGROUND

Under the FMIA, inspection program personnel perform an examination and inspect all livestock before slaughter to determine whether the animals are fit for slaughter for human food. There are some animal health conditions that can only be assessed when the livestock are alive. Thus, if an establishment does not present animals for ante-mortem inspection in accordance with 21 U.S.C. 603 and 9 CFR 309.1, inspection program personnel conducting post-mortem inspection are unable to determine whether carcasses are not adulterated and, therefore, cannot permit the carcasses to be marked as "inspected and passed."

The final rule "Prohibition of the Use of Specified Risk Materials for Human Food and Requirements for the Disposition of Non-Ambulatory Disabled Cattle; Prohibition of the Use of Certain Stunning Devices Used to Immobilize Cattle During Slaughter" codified the requirement that all non-ambulatory disabled cattle offered for slaughter are to be condemned (See attachment for the regulations pertaining to non-ambulatory disabled cattle). Non-ambulatory, disabled livestock are livestock that cannot rise from a recumbent position or that cannot walk. Non-ambulatory livestock may include, but are not limited to, those with broken appendages, severed tendons or ligaments, nerve paralysis, fractured vertebral column, or metabolic conditions. The final rule states that "FSIS determined that non-ambulatory disabled cattle present a sufficient risk of introducing the BSE agent into the human food supply so as to render the carcasses of these animals unfit for human food under section 1(m)(3) of the FMIA." The final rule also clarifies that FSIS inspection program personnel will determine on a case-by-case basis the disposition of cattle that become non-ambulatory after they have passed antemortem inspection.

VI. VERIFYING AN ESTABLISHMENT'S VOLUNTARY SEGREGATION PROCEDURES BEFORE ANTE-MORTEM INSPECTION FOR SWINE AND SHEEP

- A. When an establishment is slaughtering only market classes of swine or sheep (i.e., market hogs and lambs) and voluntarily segregates animals to facilitate its scheduling of animals for slaughter, inspection program personnel are to verify that:
- 1. market classes of swine or sheep represent the type of livestock slaughtered in the greatest number at the establishment;

NOTE: FSIS does not permit voluntary segregation, as described in this directive, of any class of cattle before FSIS performs ante-mortem inspection.

- 2. animals, except market swine, do not arrive under any Animal and Plant Health Inspection Service (APHIS) Veterinary Services (VS) permit or certificate. Market swine arriving under VS-17-30 and 17-33 are eligible for segregation under documented plant segregation procedures;
- 3. the establishment documents its segregation procedures in its HACCP plan or a prerequisite program;

- 4. the documents on the prerequisite program, and the records related to the prerequisite program, are available to inspection program personnel upon request (see FSIS Directive 5000.2, Review of Establishment Data by Inspection Personnel); and
- 5. the establishment presents all animals to inspection program personnel for inspecting before slaughter.
- B. Inspection program personnel inspecting swine and sheep ante-mortem are to:
- 1. verify that the segregation procedures are only for market classes of swine and sheep;
- 2. examine all animals found normal by the establishment while the animals are "at rest" (9 CFR 309.1(a));
- 3. select 5 to 10 percent of all animals that the establishment presents for ante-mortem inspection from several lots and observe in motion;
- 4. instruct the establishment to move abnormal animals that the PHV may condemn under 9 CFR part 311 to the designated "U.S. Suspect" pen (9 CFR 307.2(a)) for final disposition; and
- 5. randomly observe establishment personnel performing segregation procedures (i.e., segregating those animals showing signs of abnormalities or diseases from healthy animals) at least once per month.
- C. If an establishment does not have documented segregation procedures or fails to implement its segregation procedures properly, the PHV is to instruct inspection program personnel not to consider the establishment's segregation program and to follow the instructions in Section VII.

NOTE: If the establishment sorts livestock for classes other than market swine and sheep (such as cattle) and moves the livestock for inspection by inspection program personnel to the designated "U.S. Suspect" pen for final disposition, then the PHV is to carefully examine and inspect all livestock in the "U.S. Suspect" pen (9 CFR 309.2(a) and (n)).

VII. ANTE-MORTEM LIVESTOCK INSPECTION

A. Steps Inspection Program Personnel Follow for Inspecting Livestock Ante-mortem

1. When inspection program personnel perform ante-mortem inspection, they are to follow the directions in FSIS Directive 6900.1, Humane Handling of Disabled Livestock and 6900.2, Humane Handling and Slaughter of Livestock, for how to verify that the establishment is meeting humane handling requirements. All animals that are on the premises of the establishment, on vehicles that are on the premises, or animals

being handled in connection with slaughter (e.g., livestock on trucks being staged for slaughter) are to be handled humanely. Establishment employees are to handle these animals in accordance with the requirements for the humane handling of livestock (9 CFR 313.2).

- 2. Inspection program personnel are to perform ante-mortem inspection on the day of slaughter by observing all livestock (except at establishments that have voluntary segregation procedures described in section VI):
 - a. at rest; and
 - b. in motion.
- 3. When performing ante-mortem inspection, inspection program personnel are to observe:
- a. the overall condition of the animal, including the head, with attention to the eyes; the legs; and the body of the animal;
 - b. the degree of alertness, mobility, and breathing; and
 - c. whether there are any unusual swellings or any other abnormalities.
- 4. When inspection program personnel find animals showing signs of abnormalities or diseases on ante-mortem inspection, inspection program personnel should have the establishment set apart all affected animals into separate pens (e.g., a suspect pen) for further examination by the PHV (9 CFR 309.2(n)).
- 5. Inspection program personnel are to notify the PHV if non-ambulatory, disabled cattle are offered for slaughter. If non-ambulatory disabled cattle are offered for slaughter in an official establishment where the PHV is not located on premises, inspection program personnel are to immediately notify the PHV assigned to that establishment.

NOTE: Alternatively, the establishment may condemn and humanely destroy the non-ambulatory, disabled cattle.

- 6. PHVs are to conduct ante-mortem inspection on all non-ambulatory disabled cattle offered for slaughter. Non-ambulatory disabled livestock are livestock that cannot rise from a recumbent position or that cannot walk. Non-ambulatory livestock may include, but are not limited to, those animals with broken appendages, severed tendons or ligaments, nerve paralysis, fractured vertebral column, or metabolic conditions.
- 7. Inspection program personnel are to pass for slaughter, livestock that do not show signs of diseases or abnormalities and that are fit to slaughter for human consumption.

- 8. If an establishment fails to present animals for ante-mortem inspection (21 U.S.C. 603 and 9 CFR 309.1), the off-line inspection program personnel are to:
 - a. condemn the animals;
 - b. notify the Inspector-In-Charge (IIC) immediately; and
- c. issue a noncompliance record (NR) under the 03J01/2 procedure code.

B. Suspect Livestock

- 1. PHVs are to examine and take the temperature, as necessary, of abnormal or diseased livestock including those set apart by the establishment or inspection program personnel.
- 2. PHVs are to designate as "U.S. Suspect," with the appropriate eartag, all livestock:
- a. having any disease condition that may cause the PHV to condemn the carcass when inspected post-mortem,
- b. presented as non-ambulatory disabled livestock, **except** cattle. PHVs are to condemn non-ambulatory disabled cattle (see VII. C. 2.); and
- 3. PHVs are to segregate by condition and handle as "U.S. Suspect," animals affected with ocular squamous cell carcinoma (epithelioma of the eye), actinobacillosis, or actinomycosis;
- 4. PHVs are to verify that the establishment identifies any "U.S. Suspect" swine with a tattoo if they are to be mechanically-dehaired. The use of the tattoo is to maintain the identity of the swine as "U.S. Suspect" through the dehairing process (9 CFR 309.18(b)).
 - 5. To document ante-mortem findings, PHVs are to:
- a. complete FSIS Form 6150-1, Identification Tag Ante-mortem, for each animal identified as a suspect on ante-mortem inspection;
- b. record the appropriate information on the Daily Disposition Record, FSIS Form 6200-14, following the directions in FSIS Directive 6100.2, Post-mortem Livestock Inspection, Chapter IV; and
- c. record the condition (ocular squamous cell carcinoma, actinobacillosis, or actinomycosis) from VII B 3 and the number of animals affected with each condition on FSIS Form 6150-1, Identification Tag Ante-mortem. PHVs are to use a separate form for each group of animals with a condition in a specific production. (See also section VIII for information on documentation.)

NOTE: The establishment determines the size of the specific production lot.

- 6. If an establishment requests to hold livestock, including veal calves that cannot rise from a recumbent position or that cannot walk because they are tired or cold, for treatment or to treat the livestock set apart (9 CFR 309.13(b)), the PHV is to:
- a. verify that the establishment maintains the identity of the animals and holds the animals in an area that bears the documented identification of the animals, or that the establishment has received permission from the appropriate local, State, or Federal livestock sanitary official having jurisdiction to move the animals off premises;
- b. change the FSIS Form 6150-1, Identification Tag Ante-mortem Form by crossing out the word "slaughter" and by writing in the words "held for treatment" in the appropriate space for animals that are treated on premises; and
- c. remove the suspect tag, on animals that are treated off premises just before the animal is shipped.
- 7. When an establishment offers for slaughter non-ambulatory disabled livestock for ante-mortem inspection, the establishment may help an animal that is capable of rising by providing the animal support (e.g., providing a steadying hand). Such support may not be by mechanical means, nor is the establishment permitted to lift the animal in any way. Also, once the animal has risen, it is to ambulate without assistance, so that the PHV can observe it in motion. The establishment must treat the animal humanely when attempting to have it rise or ambulate. FSIS does not consider forcing an animal to stand or ambulate by kicking or prodding (e.g., electrical prodding) to be humane.
- 8. The IIC is to contact the Policy Development Division (PDD) (formerly the Technical Service Center), through supervisory channels, if he or she has not received a slaughter permit when an establishment presents for ante-mortem inspection animals used in a research investigation involving an experimental biological product, drug, or chemical (9 CFR 309.17). The PDD issues the slaughter permit to the IIC, DO, and the researcher based on information provided by the researcher.

C. PHV Verification of Cattle That Become Non-ambulatory After Antemortem Inspection

- 1. PHVs are to reassess and determine the disposition of cattle that become non-ambulatory after having passed ante-mortem inspection on a case-by-case basis to determine if the cattle are eligible to proceed to slaughter (9 CFR 309.3(e));
- 2. PHVs are to tag as "U.S. Suspect" all cattle suffering an acute (immediate) injury (e.g., when an animal falls or when an animal becomes trapped and breaks its leg) after passing ante-mortem inspection and is on its way to the knock box (9 CFR 309.3(e)); and

3. when the PHV cannot determine whether a bovine animal became non-ambulatory after passing ante-mortem inspection from a specific, acute injury, the PHV is to tag the animal as "U.S. Condemned;" If, in the professional opinion of the PHV, the injury was brought on by a chronic condition, then the PHV is to tag the animal "U.S. Condemned."

NOTE: Acute injuries should occur extremely rarely after animals have passed antemortem inspection.

D. Condemned Livestock

- 1. In accordance with 9 CFR 309.3(a) (e), PHVs are to identify as "U.S. Condemned" all animals that are condemned on ante-mortem inspection (9 CFR 309.3(a) (e)):
- a. livestock that are dead or in a dying condition when offered for slaughter on the premises of the official establishment;
- b. livestock that are plainly showing on ante-mortem inspection any disease or condition that, under 9 CFR part 311, would cause the PHV to condemn the carcass when inspecting post-mortem;
- c. any swine having a temperature of 106°F or higher, and any cattle, sheep, goats, horses, mules, or other equines having a temperature of 105°F or higher;

NOTE: If there is doubt as to the cause of the high temperature, an establishment may hold an animal for further observation, at the discretion of, and under the supervision of, inspection program personnel. The PHV is to re-examine the animal, including taking the temperature. If the temperature is still 106° F or above for swine or 105° F or above for other livestock, the PHV is to condemn the animal. Animals may have high temperatures because of a bacterial infection. Animals may also have increased temperatures for reasons other than disease. For example, in the summer, animals may develop heat stress from elevated environmental temperatures.

- d. all animals in a comatose or semicomatose condition;
- e. all non-ambulatory disabled cattle that are offered for slaughter; and
- f. all animals with any other condition that would preclude the release of the animal for slaughter, including all livestock exhibiting clinical signs of central nervous system disorders. Clinical signs for nervous system disorders on ante-mortem inspection include, but are not limited to, the following: excitement or depression; deviation or rotation of the head; drooping of the lips, eyelids, cheeks, and ears; convulsions and tremors; paralysis; sudden onset of fainting; head pressing; aimless walking; ataxia; and blindness. Other diseases may mimic nervous system disorders. For example, lameness may be difficult to differentiate from ataxia or paresis, and shivering from the cold may be difficult to differentiate from tremors. Inspection program personnel are to retain any animal exhibiting signs of nervous system disorders for veterinary disposition (9 CFR 309.4(a)).

2. PHVs are to:

a. verify the disposal of livestock by the establishment (9 CFR 314) and that the establishment maintains the required records (9 CFR 320), or that the animals are set apart and held for further observation or treatment under supervision of a program employee; and

NOTE: It is the responsibility of the PHV to verify that the same animal identified as "U.S. Condemned" is either disposed of properly or held for further observation or treatment by the establishment (see 9 CFR 309.13(a)(b)).

b. complete FSIS Form 6150-1, Identification Tag – Ante-mortem, for each animal identified as "U.S. Condemned" on ante-mortem inspection.

D. Delayed Slaughter

Low-volume establishments utilize delayed slaughter when slaughtering animals on a day other than on the day of ante-mortem inspection. A low-volume establishment for this purpose is one that slaughters 1-15 animals per day. To conduct delayed slaughter, establishments need approval by the Frontline Supervisor (FLS). Delayed slaughter is not permitted for cattle (9 CFR 309.1(a) and 311.27).

Off-line inspection program personnel verify that the establishment:

- 1. only slaughters livestock that have received ante-mortem inspection within the previous 24 hours;
- 2. does not slaughter livestock designated as "U.S. Suspect" without the presence of inspection program personnel; and
- 3. does not slaughter and chill in one day more animals than were inspected on ante-mortem inspection.

E. Emergency Slaughter

For livestock species other than cattle, if an establishment informs the PHV that it was necessary for it to slaughter an animal because of a serious injury at a time other than normal inspection hours (9 CFR 309.12), then the PHV is to:

- 1. determine post-mortem whether there is evidence of an injury present that rendered emergency slaughter necessary. PHVs are to condemn the entire carcass if there is no evidence of a condition that provides a valid reason for the emergency slaughter; and
- 2. assess the condition of the animal that underwent the emergency slaughter and make a disposition determination. PHVs are to condemn the entire

carcass if he/she finds evidence of a lesion to indicate sickness or disease or any other condition requiring such disposition (9 CFR 311.27).

NOTE: FSIS does not permit emergency slaughter of cattle. The PHV is to check all cattle before slaughter.

VIII. DOCUMENTATION AND ENFORCEMENT

A. Identification System

Inspection program personnel are to verify that the establishment has an animal identification system that accurately identifies each animal and establishes that inspection program personnel have performed ante-mortem inspection on that animal (9 CFR 307.2(a), 310.2(a)(b), and 320.1(b)(1)). An example is the pen card system.

B. Documentation

- 1. PHVs are to complete FSIS Form 6150-1, Identification Tag Antemortem, when an animal is "U.S. Suspect" or "U.S. Condemned" on ante-mortem inspection and file the form in the inspection office. Inspection program personnel are to retain the form for one year.
- 2. Complete Form 6150-1, Identification Tag Ante-mortem, by recording the following:
- a. Slaughter at Est. No. Indicate the official establishment number where the animal is to be slaughtered;
- b. Condemn or Suspect Tag No. Write in the tag number and cross out the not applicable "U.S. Condemned" or "U.S. Suspect;"
- c. Kind of Animal Species, breed, or class of animal (e.g., Hereford Bull, Hampshire gilt, mixed breed ewe, etc.);
 - d. Sex;
- e. Tagged For Name of condition causing animal to be a suspect. Additional information may be included on the back of the form, write "see back of form" on the front when the back is used;
- f. Temperature Actual temperature of the animal (TB reactors and animals the PHV suspects may have an abnormal temperature);
 - g. Weight Estimate the animal's weight in pounds;
- h. Remarks Brief description of ante-mortem findings that may aid post-mortem disposition. Also, record back tags and any other identifying numbers;

- i. PHV Signature A PHV is to sign the form when an animal is condemned;
 - j. Date Current date; and
- k. Post-mortem Report Use of the Post-mortem Report section of the form is optional. The observations documented on the form should support the decision to tag the bovine as "U.S. Suspect," including any re-examinations of cattle. Attach FSIS Form 6150-1 to the associated FSIS Form 6200-14, Daily Disposition Record. Retain FSIS Form 6200-14 and, if attached, FSIS Form 6150-1, for one fiscal year.
- 3. Additional uses for FSIS Form 6150-1, Identification Tag Antemortem, include:
- a. For a TB reactor, but use the reactor tag number instead of the suspect tag number;
- b. For epithelioma, actinobacillosis, and actinomycosis. Include the number of animals in the specific production on line 2; and

NOTE: A separate FSIS Form 6150-1, Identification Tag – Ante-mortem is not necessary for each bovine with epithelioma of the eye, actinobacillosis, or actinomycosis. However, the PHV is to verify that the establishment segregates affected animals into a separate specific production and is to record the condition and number of animals on the form. The establishment determines the size of the specific production. When the animals are slaughtered, the PHV is to identify each animal individually with a multi-sectioned "U.S. Rejected – U. S. Retain" tag and record them as suspects on the Daily Disposition Record, FSIS Form 6200-14 (see FSIS Directive 6100.2, Post-mortem Livestock Inspection, Ch. IV. I. B. 2.).

- c. PHVs are to complete FSIS Form 6150-1 for each "U.S. Condemned" animal, alive or dead. Mark through suspect and record the condemned tag number.
- 4. Use of Form 6200-16, Summary of Ante-mortem Examination is optional, at the discretion of the FLS. When directed, the PHV is to complete this form only on days of slaughter. Inspection program personnel are to retain this form for one year. If directed by the FLS, PHVs are to complete the Summary of Ante-mortem Examination, FSIS Form 6200-16, by recording the following:
- a. Date of last report, this species. This refers to the last date this species was slaughtered,
 - b. Establishment number,
 - c. Today's date,
- d. Name of species inspected (use a separate FSIS Form 6200-16 for each species inspected on this date),

e. Number of animals passed for regular slaughter (does not include suspects),

f. Number of animals that were suspected on the previous day but not slaughtered,

g. Number of animals suspected today (include both tagged and handled as suspects),

h. Total of lines f and g,

i. Number of animals that were suspected today and the previous day but later released and not slaughtered as suspects,

j. Number of animals that died in the pens today and the previous day after being tagged as suspects from today and the previous day,

k. Number of suspect animals slaughtered on this date,

I. Total of lines i, j, and k,

m. Number of suspect animals that are not slaughtered and are being held as suspects from today and the previous day,

n. Number condemned on ante-mortem plus dead animals (do not include suspects that died in pens – they are reported on line k),

o. Write in "dead" or cause for condemnation and the number of animals disposed of in that category,

p. The first condemned tag number and the last condemned tag number used, and

q. The signature of inspection program personnel completing the report.

For technical questions, contact the Policy Development Division (formerly the Technical Service Center) at 1-800-233-3935.

Assistant Administrator

Plung Salufle-

Office of Policy, Program, and Employee Development

Attachment

PART 309--ANTE-MORTEM INSPECTION

1. The authority citation for part 309 is revised to read as follows:

Authority: 21 U.S.C. 601-695; 7 CFR 2.18, 2.53.

2. Section 309.3 is amended by revising paragraph (e) to read as follows:

Sec. 309.3 Dead, dying, disabled, or diseased and similar livestock.

* * * * *

- (e) Non-ambulatory disabled cattle that are offered for slaughter must be condemned and disposed of in accordance with Sec. 309.13. FSIS inspection personnel will determine the disposition of cattle that become non-ambulatory after they have passed ante-mortem inspection on a case-by-case basis.
- 3. Paragraph (b) of Sec. 309.13 is amended by adding a new second sentence to read as follows:

Sec. 309.13 Disposition of condemned livestock.

* * * * *

(b) * * * Veal calves that are unable to rise from a recumbent position and walk because they are tired or cold may also be set apart and held as provided in this paragraph. * * *

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